L E A

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What is the relationship between contemporary digital media and contemporary society? Is it possible to affirm that digital media are without sin and exist purely in a complex socio-political and economic context within which the users bring with them their ethical and cultural complexities? This issue, through a range of scholarly writings, analyzes the problems of ethics and sin within contemporary digital media frameworks.

WITHOUT SIN
FREEDOM AND TABOO IN DIGITAL MEDIA

Without Sin: Freedom and Taboo in Digital Media

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Post-Society:
Data Capture and Erasure
One Click at a Time

"Oh, in the name of God! Now I know what it feels like to be God!"

Frankenstein (1931)

They must have felt like gods at the NSA when they discovered that they were able to spy on anyone. What feels ridiculous to someone that works with digital media is the level of ignorance that people continue to have about how much everyone else knows or can know about 'you.' If only people were willing to pay someone, or to spend a bit of time searching through digital data services themselves,they would discover a range of services that have started to commercialize collective data: bought and sold through a range of semi-public businesses and almost privatized governmental agencies. Public records of infractions and crimes are available for 'you' to know what 'your' neighbor has been up to.These deals, if not outright illegal, are characterized by unsolved ethical issues since they are a 'selling' of state documents that were never supposed to be so easily accessible to a global audience.

Concurrently as I write this introduction, I read that the maddened Angela Merkel is profoundly shocked that her mobile phone has been tapped into – this is naive at best but also deeply concerning: since to not understand what has happened politically and technologically in the 21st century one must have been living on the moon.Perhaps it is an act or a pantomimestagedfor the benefit of those 'common' people that need to continue living with the strong belief or faith that their lives are in good hands, that of the state.

Nevertheless it speaks of a 'madness' of the politician as a category. A madness characterized by an alienation from the rest of society that takes the form of isolation. This isolation is, in Foucauldian terms, none other than the enforcement of a voluntary seclusion in the prison and the mad house.

The prisons within which the military, corporate, financial and political worlds have shut themselves in speak increasingly of paranoia and fear. As such the voluntary prison within which they have sought refuge speaks more and more the confused language that one may have imagined to hear from the *Stultifera Navis*.

Paranoia, narcissism and omnipotence, all belong to the delirium of the sociopaths, [1] who push towards the horizon, following the trajectory set by the 'deranged minds.'

It is for the other world that the madman sets sail in his fools' boat; it is from the other world that he comes when he disembarks. [2]

This otherworldliness – this being an alien from another world – has increasingly become the characteristic of contemporary political discourse, which, detached from the reality of the 'majority' of people, feeds into the godlike complex. Foolishness and lunacy reinforce this perspective, creating a rationale that drives the *Stultifera Navis* towards its destiny inexorably, bringing all others with them.

Having segregated themselves in a prison of their own doing, the politicians look at all others as being part of a large mad house. It is from the upper deck of a gilded prison that politicians stir the masses in the lower decks into a frenzy of fear and obedience.

Why should it be in this discourse, whose forms we have seen to be so faithful to the rules of reason, that we find all those signs which will most manifestly declare the very absence of reason? [3]

Discourses, and in particular political discourses, no longer mask the reality of madness and with it the feeling of having become omnipotent talks of human madness in its attempt to acquire the impossible: that of being not just godlike, but God.

As omnipotent and omniscient gods the NSA should allow the state to 'see.'The reality is that the 'hands' of the state are no longer functional and have been substituted with prostheses wirelessly controlled by the sociopaths of globalized corporations. Theamputation of the hands happenedwhile the state itself was merrily looking somewhere else, tooblissfullybusy counting the money that was flowing through neo-capitalistic financial dreams of renewed prosperity and Napoleonic grandeur.

The madness is also in the discourse about data, deprived of ethical concerns and rootedwithinperceptions of both post-democracy and post-state.So much so that we could speak of a post-data society, within which the current post-societal existence is the consequence of profound changes and alterations to an ideal way of living that technology – as its greatest sin – still presents as participatory and horizontal but not as plutocratic and hierarchical.

In order to discuss the present post-societal condition, one would need first to analyze the cultural disregard that people have, or perhaps have acquired, for their personal data and the increasing lack of participation in the alteration of the frameworks set for post-data.

This disregard for personal data is part of cultural forms of concession and contracting that are determined and shaped not by rights but through the mass loss of a few rights in exchange for a) participation in a product as early adopters (Google), b) for design status and appearance (Apple), c) social conventions and entertainment (Facebook) and (Twitter).

Big data offers an insight into the problem of big losses if a catastrophe, accidental or intentional, should ever strike big databases. The right of ownership of the 'real object' that existed in the data-cloudwill become the new arena of post-data conflict. In this context of loss, if the crisis of the big banks has demonstrated anything, citizens will bear the brunt of the losses that will be spread iniquitously through 'everyone else.'

The problem is therefore characterized by multiple levels of complexity that can overall be referred to as a general problem of ethics.Of data, interpreted asthe ethical collection and usage of massive amounts of data. Also the ethical issues of post-data and their technologies has to be linked to a psychological understanding of the role that individuals play within society, both singularly and collectively through the use of media that engender new behavioral social systems through the access and usage of big data as sources of information.

Both Prof. Johnny Golding and Prof. Richard Gere present in this collection of essays two perspectives that, by looking at taboos and the sinful nature of technology, demand from the reader a reflection on

the role that ethics plays or no longer plays within contemporary mediated societies.

Concepts of technological neutrality as well as economic neutrality have become enforced taboos when the experiential understanding is that tools that possess a degree of danger should be handled with a modicum of self-control and restraint.

The merging of economic and technological neutrality has generated corporate giants that have acquired a global stronghold on people's digital data. In the construction of arguments in favor or against a modicum of control for these economic and technological giants,the state and its political representatives have thus far considered it convenient not to side with the libertarian argument, since the control was being exercised on the citizen; a category to which politicians and corporate tycoons and other plutocrats and higher managers believe they do not belong to or want to be reduced to.

The problem is then not so much that the German citizens, or the rest of the world, were spied on. The taboo that has been infringed is that Angela Merkel, a head of state, was spied on. This implies an unwillingly democratic reduction from the NSA of all heads of state to 'normal citizens.' The disruption and the violated taboo is that all people are data in a horizontal structure that does not admit hierarchical distinctions and discriminations. In this sense perhaps digital data are violating the last taboo: anyone can be spied upon, creating a truly democratic society of surveillance.

The construction of digital data is such that there is not a normal, a superior, a better or a worse, but everything and everyone is reduced to data. That includes Angela Merkel and any other head of state. Suddenly the process of spying represents a welcome reduction to a basic common denominator: there is no

difference between a German head of state or a blue collar worker; the NSA can spy on both and digital data are collected on both.

If anything was achieved by the NSA it was an egalitarian treatment of all of those who can be spied upon: a horizontal democratic system of spying that does not fear class, political status or money. This is perhaps the best enactment of American egalitarianism: we spy upon all equally and fully with no discrimination based on race, religion, social status, political affiliation or sexual orientation.

But the term spying does not quite manifest the profound level of Panopticon within which we happen to have chosen to live, by giving up and squandering inherited democratic liberties one right at a time, through one agreement at a time, with one click at a time.

These are some of the contemporary issues that this new LEA volume addresses, presenting a series of writings and perspectives from a variety of scholarly fields.

This LEA volume is the result of a collaboration with Dr. Donna Leishman and presents a varied number of perspectives on the infringement of taboos within contemporary digital media.

This issue features a new logo on its cover, that of New York University, Steinhardt School of Culture, Education, and Human Development.

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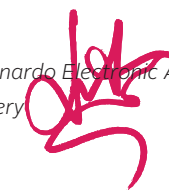
I also have to thank the authors for their patience in complying with the LEA guidelines.

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Lanfranco Aceti
Editor in Chief, Leonardo Electronic Almanac
Director, Kasa Gallery

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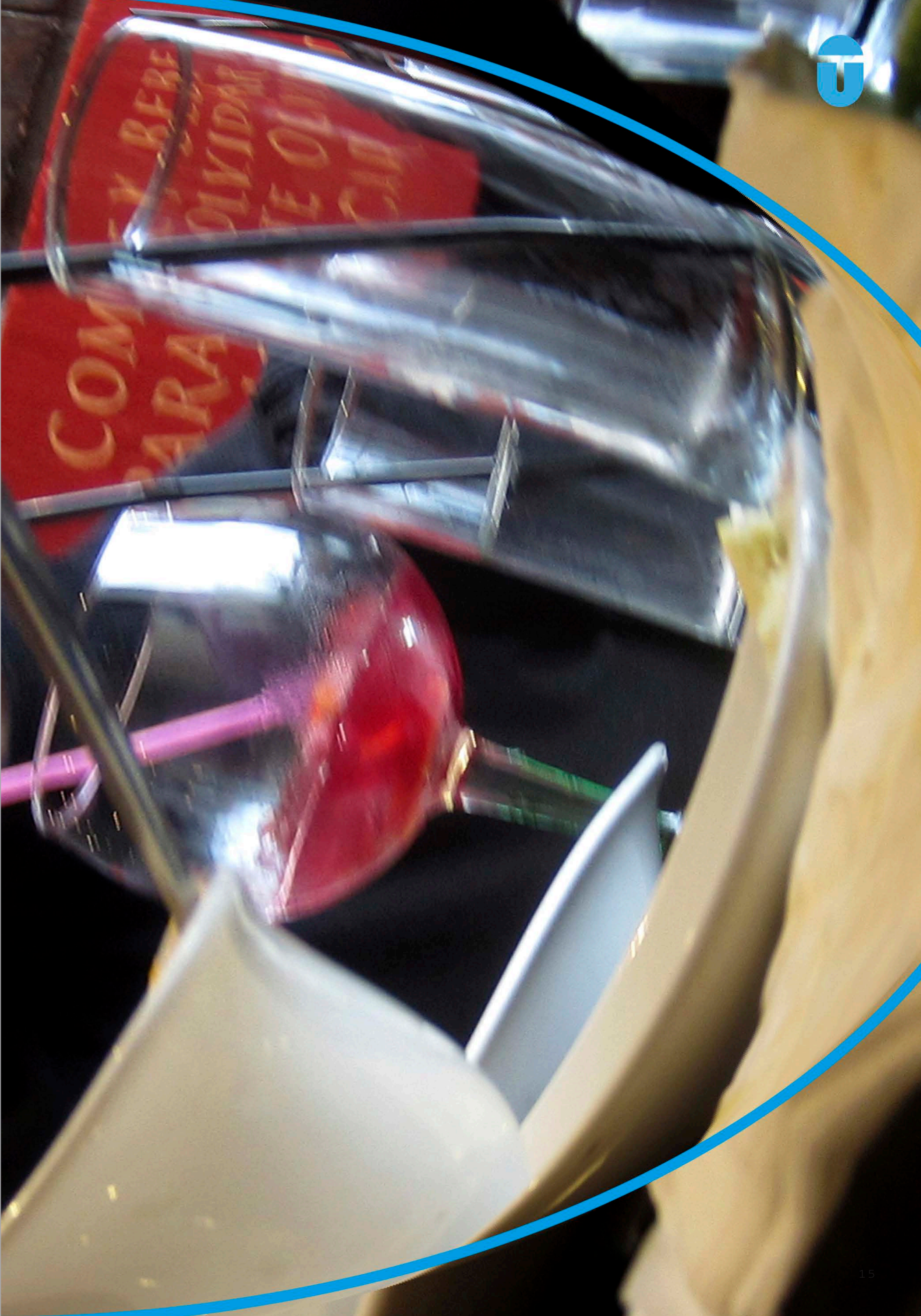
Without Sin: Freedom and Taboo in Digital Media

INTRODUCTION

"Without Sin: Freedom and Taboo in Digital Media" is both the title of this special edition and the title of a panel that was held at ISEA 2011. The goal of the panel was to explore the disinhibited mind's ability to exercise freedom, act on desires and explore the taboo whilst also surveying the boarder question of the moral economy of human activity and how this is translates (or not) within digital media. The original panelists (some of whom have contributed to the this edition) helped to further delineate additional issues surrounding identity, ethics, human socialization and the need to better capture/understand/perceive how we are being affected by our technologies (for good or bad).

In the call for participation, I offered the view that contemporary social technologies are continuously changing our practical reality, a reality where human experience and technical artifacts have become beyond intertwined, but for many interwoven, inseparable – if this were to be true then type of cognizance (legal and personal) do we need to develop? Implied in this call is the need for both a better awareness and jurisdiction of these emergent issues. Whilst this edition is not (and could not be) a unified survey of human activity and digital media; the final edition contains 17 multidisciplinary papers spanning Law, Curation, Pedagogy, Choreography, Art History, Political Science, Creative Practice and Critical Theory – the volume attempts to illustrate the complexity of the situation and if possible the kinship between pertinent disciplines.

Human relationships are rich and they're messy and they're demanding. And we clean them up with technology. Texting, email, posting, all of these things let us present the self, as we want to be. We get to edit, and that means we get to delete, and that means we get to retouch, the face, the voice, the flesh, the body – not too little, not too much, just right. [1]

Sherry Turkle's current hypothesis is that technology has introduced mechanisms that bypass traditional concepts of both community and identity indeed that we are facing (and some of us are struggling with) an array of reconceptualizations. Zygmunt Bauman in his essay "From Pilgrim to Tourist – or a Short History of Identity" suggests that:

One thinks of identity whenever one is not sure if where one belongs; that is, one is not sure how to place oneself among the evident variety if behavioral styles and patterns, and how to make sure that people would accept this placement as right and proper, so that both sides would know how to go on in each other's presence. 'Identity' is the name given to the escape sought from that uncertainty. [2]

Our 'post-social' context where increased communication, travel and migration bought about by technological advances has only multiplied Bauman's conditions of uncertainty. Whilst there may be aesthetic tropes within social media, there is no universally accepted authority within contemporary culture nor is there an easy mutual acceptance of what is 'right and proper' after all we could be engaging in different iterations of "backward presence" or "forward presence" [3] whilst interacting with human and non-human alike (see Simone O'Callaghan's contribution: "Seductive Technologies and Inadvertent Voyeurs" for a further exploration of presence and intimacy).

Editing such a broad set of responses required an editorial approach that both allowed full expansion of each paper's discourse whilst looking for interconnections (and oppositions) in attempt to distil some commonalties. This was achieved by mentally placing citation, speculation and proposition between one another. Spilling the 'meaning' of the individual contributions into proximate conceptual spaces inhabited by other papers and looking for issues that overlapped or resonated allowed me formulate a sense of what might become future pertinent themes, and what now follows below are the notes from this process.

What Social Contract?

Hereby it is manifest that during the time men live without a common power to keep them all in awe, they are in that condition which is called war; and such a war as is of every man against every man. (Thomas Hobbes in chapter XIII of the *Leviathan* [4])

Deborah Swack's "FEELTRACE and the Emotions (after Charles Darwin)," Johnny Golding's "Ana-Materialism & The Pineal Eye: Becoming Mouth-Breast" and Kriss Ravetto's "Anonymous Social As Political" argue that our perception of political authority is somewhere between shaky towards becoming erased altogether. Whilst the original 17th century rational for sublimating to a political authority – i.e. we'd default back to a war like state in the absence of a binding social contract – seems like a overwrought fear, the capacity for repugnant anti-social behavior as a consequence of no longer being in awe of any common power is real and increasingly impactful. [5] Problematically the notion of a government that has been created by individuals to protect themselves from one another sadly seems hopelessly incongruent in today's increasingly skeptical context. Co-joined to the dissipation of perceptible political entities – the power dynamics of being 'good' rather than 'bad' and or 'sinful' appears to be one of most flimsy of our prior social borders. The new reality that allows us to transgress and explore our tastes and predictions from a remote and often depersonalized position feels safer (i.e. with less personal accountability) a scenario that is a further exacerbated space vacated by the historic role of the church as a civic authority. Mikhail Pushkin in his paper "Do we need morality anymore?" explores the online moral value system and how this ties into the deleterious effect of the sensationalism in traditional mass media. He suggests that the absence of restrictive online social structure means the very consciousness of sin and guilt has now changed and potentially so has our capability of experiencing the emotions tied to guilt. [6] Sandra Wilson and Lila Gomez in their paper "The Premediation of Identity Management in Art & Design – New Model Cyborgs – Organic & Digital" concur stating that "the line dividing taboos from desires is often blurred, and a taboo can quickly flip into a desire, if the conditions under which that interaction take place change."

The Free?

The issue of freedom seems to be where much of the debate continues – between what constitutes false liberty and real freedoms. Unique in their own approach Golding's and Pushkin's papers challenge the premise that is implied in this edition's title – that 'Freedom and Taboo' even have a place at all in our contemporary existence as our established codes of morality (and ethics) have been radically reconfigured. This stance made me recall Hobbes's first treaty where he argued that "commodious living" (i.e. morality, politics, society), are purely conventional and that moral terms are not objective states of affairs but are reflections of tastes and preferences – indeed within another of his key concepts (i.e. the "State of Nature") 'anything goes' as nothing is immoral and or unjust. [6] It would 'appear' that we are freer from traditional institutional controls whilst at the same time one could argue that the borders of contiguous social forms (i.e.

procedures, networks, our relationship to objects and things) seem to have dissipated alongside our capacity to perceive them. The problematic lack of an established conventional commodious living such as Bauman's idea that something is 'right and proper' is under challenge by the individualized complexity thrown up from our disinhibited minds, which can result in benign or toxic or 'other' behaviors depending on our personality's variables. [7] Ravetto describes how Anonymous consciously inhabits such an 'other' space:

Anonymous demonstrates how the common cannot take on an ethical or coherent political message. It can only produce a heterogeneity of spontaneous actions, contradictory messages, and embrace its contradictions, its act of vigilante justice as much as its dark, racist, sexist, homophobic and predatory qualities.

Perception
Traditionally good cognition of identity/society/relationships (networks and procedures) was achieved through a mix of social conditioning and astute mindfulness. On the other hand at present the dissipation of contiguous social forms has problematized the whole process creating multiple social situations (new and prior) and rather than a semi-stable situation (to reflect upon) we are faced with a digital deluge of unverifiable information. Perception and memory comes up in David R. Burns's paper "Media, Memory, and Representation in the Digital Age: Rebirth" where he looks at the problematic role of digital mediation in his personal experience of the 9/11. He recalls the discombobulating feeling of being: "part of the digital media being internationally broadcast across the world." Burns seeks to highlight the media's influence over an individual's constructed memories. From a different perspective Charlie Gere reminds us of the prominence (and shortcomings) of our ocular-centric perspective in his discussion of "Alterity, Pornography,

and the Divine" and cites Martin Jay's essay "Scopic Regimes of Modernity" [8] which in turn explores a variety of significant core concepts of modernity where vision and knowledge meet and influence one another. Gere/Jay's line of references resurrect for the reader Michel Foucault's notion of the "Panopticon" (where surveillance is diffused as a principle of social organization), [9] Guy DeDord's *The Society of the Spectacle* i.e. "All that once was directly lived has become mere representation") [10] and Richard Rorty's *Philosophy and the Mirror of Nature* (published in 1979). [11] The latter gave form to an enduringly relevant question: are we overly reliant on a representational theory of perception? And how does this intersect with the risks associated with solipsistic introjection within non face-to-face online interactions? The ethics of 'looking' and data collection is also a feature of Deborah Burns's paper "Differential Surveillance of Students: Surveillance/Sousveillance Art as Opportunities for Reform" in which Burns asks questions of the higher education system and its complicity in the further erosion of student privacy. Burn's interest in accountability bridges us back to Foucault's idea of panoptic diffusion:

He who is subjected to a field of visibility, and who knows it, assumes responsibility for the constraints of power; he makes them play spontaneously upon himself; he inscribes in himself the power relation in which he simultaneously plays both roles; he becomes the principle of his own subjection [12]

In panoptic diffusion the knowingness of the subject is key – as we move towards naturalization of surveillance and data capture through mass digitization such power relationships change. This is a concern mirrored by Eric Schmidt Google's Executive Chairman when considering the reach of our digital footprints: "I don't believe society understands what happens when everything is available, knowable and recorded

by everyone all the time." [13] Smita Kheria's "Copyright and Digital Art practice: The 'Schizophrenic' Position of the Digital Artist" and Alana Kushnir's "When Curating Meets Piracy: Rehashing the History of Unauthorised Exhibition-Making" explore accountability and power relationships in different loci whilst looking at the mitigation of creative appropriation and reuse. It is clear that in this area serious reconfigurations have occurred and that new paradigms of acceptability (often counter to the legal reality) are at play.

Bauman's belief that "One thinks of identity whenever one is not sure if where one belongs" [14] maybe a clue into why social media have become such an integral part of modern society. It is after all an activity that privileges 'looking' and objectifying without the recipient's direct engagement – a new power relationship quite displaced from traditional (identity affirming) social interactions. In this context of social media over dependency it may be timely to reconsider Guy-Ernest Debord's 'thesis 30':

The externality of the spectacle in relation to the active man appears in the fact that his own gestures are no longer his but those of another who represents them to him. This is why the spectator feels at home nowhere, because the spectacle is everywhere. [15]

Underneath these issues of perception / presence / identity / is a change or at least a blurring in our political (and personal) agency. Don Ritter's paper "Content Osmosis and the Political Economy of Social Media" functions as a reminder of the historical precedents and continued subterfuges that occur in mediated feelings of empowerment. Whilst Brigit Bachler in her paper "Like Reality" presents to the reader that "besides reality television formats, social networking sites such as Facebook have successfully delivered a new form of watching each other, in a seemingly safe

setting, on a screen at home" and that "the appeal of the real becomes the promise of access to the reality of manipulation." [16] The notion of better access to the 'untruth' of things also appears in Ravetto's paper "Anonymous: Social as Political" where she argues that "secrecy and openness are in fact aporias." What is unclear is that, as society maintains its voyeuristic bent and the spectacle is being conflated into the banality of social media, are we becoming occluded from meaningful developmental human interactions? If so, we are to re-create a sense of agency in a process challenged (or already transformed) by clever implicit back-end data gathering [17] and an unknown/undeclared use our data's mined 'self.' Then, and only then, dissociative anonymity may become one strategy that allows us to be more independent; to be willed enough to see the world from our own distinctive needs whilst devising our own extensions to the long genealogy of moral concepts.

Somewhere / Someplace
Perpetual evolution and sustained emergence is one of the other interconnecting threads found within the edition. Many of the authors recognize a requirement for fluidity as a reaction to the pace of change. Geographer David Harvey uses the term "space-time compression" to refer to "processes that . . . revolutionize the objective qualities of space and time." [18] Indeed there seems to be consensus in the edition that we are 'in' an accelerated existence and a concomitant dissolution of traditional spatial co-ordinates – Swack cites Joanna Zylinska's 'human being' to a perpetual "human becoming" [19] whilst Golding in her paper reminds us that Hobbes also asserted that "[f]or seeing life is but a motion of Limbs" [20] and that motion, comes from motion and is inextricably linked to the development and right of the individual. But Golding expands this changing of state further and argues where repetition (and loop) exist so does a different experience:

The usual culprits of time and space (or time as distinct from space and vice versa), along with identity, meaning, Existenz, Being, reconfigure via a relational morphogenesis of velocity, mass, and intensity. This is an immanent surface cohesion, the compelling into a 'this' or a 'here' or a 'now,' a space-time terrain, a collapse and rearticulation of the tick-tick-ticking of distance, movement, speed, born through the repetitive but relative enfolding of otherness, symmetry and diversion.

Golding's is a bewildering proposition requiring a frame of mind traditionally fostered by theoretical physicists but one that may aptly summarize the nature of the quandary. The authors contributing to this edition all exist in their own ways in a post-digital environment, anthropologist Lucy Suchman describes this environment as being "the view from nowhere, detached intimacy, and located accountability." [21] Wilson and Gomez further offer a possible coping strategy by exploring the usefulness of Jay Bolter and Richard Grusin's "pre-mediation" as a means to externalize a host of fears and reduce negative emotions in the face of uncertainty. The imperative to create some strategies to make sense of some of these pressing issues is something that I explore in my own contribution in which I offer the new term *Precarious Design* – as a category of contemporary practice that is emerging from the design community. Precarious Design encompasses a set of practices that by expressing current and near future scenarios are well positioned to probe deeper and tease out important underlying societal assumptions to attain understanding or control in our context of sustained cultural and technological change.

Embodiment
In theory our deterritorialized and changed relationship with our materiality provides a new context in which a disinhibited mind could better act on desires

and explore the taboo. Ken Hollings's paper "THERE MUST BE SOMETHING WRONG WITH THIS, SALLY... Faults, lapses and imperfections in the sex life of machines" – presents a compelling survey of the early origin of when humans began to objectify and try live through our machines starting with disembodiment of voice as self that arose from the recording of sound via the Edison phonograph in 1876. Golding and Swack mull over the implications of the digital on embodiment and what it means now to be 'human' as we veer away from biological truth and associated moral values towards something else. Sue Hawksley's "Dancing on the Head of a Sin: touch, dance and taboo" reminds us of our sensorial basis in which:

Touch is generally the least shared, or acknowledged, and the most taboo of the senses. Haptic and touch-screen technologies are becoming ubiquitous, but although this makes touch more commonly experienced or shared, it is often reframed through the virtual, while inter-personal touch still tends to remain sexualized, militarized or medicalized (in most Western cultures at least).

Within her paper Hawksley provides an argument (and example) on how the mediation of one taboo – dance – through another – touch – could mitigate the perceived moral dangers and usual frames of social responsibility. Swack raises bioethical questions about the future nature of life for humans and "the embodiment and containment of the self and its symbiotic integration and enhancement with technology and machines." Whilst Wilson and Gomez's go on to discuss *Bioprescence* by Shiho Fukuhara and Georg Tremmel – a project that provocatively "creates Human DNA trees by transcoding the essence of a human being within the DNA of a tree in order to create 'Living Memorials' or 'Transgenic Tombstones'" [22] – as an example of a manifest situation that still yields a (rare) feeling of transgression into the taboo.

CONCLUSION

In the interstices of this edition there are some questions/observations that remain somewhat unanswered and others that are nascent in their formation. They are listed below as a last comment and as a gateway to further considerations.

Does freedom from traditional hierarchy equate to empowerment when structures and social boundaries are also massively variable and dispersed and are pervasive to the point of incomprehension/invalidation? Or is there some salve to be found in Foucault's line that "'Power is everywhere' and 'comes from everywhere' so in this sense is neither an agency nor a structure," [23] thus nothing is actually being 'lost' in our current context? And is it possible that power has always resided within the individual and we only need to readjust to this autonomy?

Conventional political power (and their panoptic strategies) seem to be stalling, as efforts to resist and subvert deep-seated and long-held governmental secrecy over military/intelligence activities have gained increased momentum while their once privileged data joins in the leaky soft membrane that is the ethics of sharing digitally stored information.

Through dissociative strategies like online anonymity comes power re-balance, potentially giving the individual better recourse to contest unjust actions/laws but what happens when we have no meaningful social contract to direct our civility? Its seems pertinent to explore if we may be in need of a new social contract that reconnects or reconfigures the idea of accountability – indeed it was interesting to see the contrast between Suchman's observed 'lack of accountability' and the Anonymous collective agenda of holding (often political or corporate) hypocrites 'accountable' through punitive measures such as Denial-of-Service attacks.

Regarding de-contextualization of the image / identity – there seems to be something worth bracing oneself against in the free-fall of taxonomies, how we see, how we relate, how we perceive, how we understand that even the surface of things has changed and could still be changing. There is no longer a floating signifier but potentially an abandoned sign in a cloud of dissipating (or endlessly shifting) signification. Where once:

The judges of normality are present everywhere. We are in the society of the teacher-judge, the doctor-judge, the educator-judge, the 'social-worker'-judge; it is on them that the universal reign of the normative is based; and each individual, wherever he may find himself, subjects to it his body, his gestures, his behaviour, his aptitudes, his achievements. [24]

There now is no culturally specific normal in the diffuse digital-physical continuum, which makes the materiality and durability of truth very tenuous indeed; a scenario that judges-teaches-social workers are having some difficulty in addressing and responding to in a timely manner, an activity that the theoretically speculative and methodologically informed research as contained within this edition can hopefully help them with.

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.   As perhaps Friedrich Nietzsche would argue... He has previously described "orgies of feelings" that are directly linked to our capacity to feel sin and guilt. "To wrench the human soul from its moorings, to immerse it in terrors, ice, flames, and raptures to such an extent that it is liberated from all petty displeasure, gloom, and depression as by a flash of lightning" Friedrich Nietzsche, *The Genealogy of Morals,* trans. Horace Samuel (New York: Russell and Russell, 1964), 139.

6. Hobbes, *Leviathan*, 409.

7. Consequential subsets within a disinhibited mind are dissociative anonymity (you don't know me) and dissociative imagination (its just a game), which can lead to benign actions such as random acts of kindness or being more affectionate or potentially toxic (exploring more violent assertive sides of ones nature) and 'other' behaviors.

.   See: John Suler, "The Online Disinhibition Effect," *CyberPsychology and Behavior* 7 (2004): 321-326.

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PRECARIOUS DESIGN

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ABSTRACT

In the post-digital Web 3.0 the world moves onwards in an accelerated and complex manner and many structures and identities are left anachronistic and economically vulnerable (publishing, journalism, music to name a few). The 'virtues' of access, connectivity and sharing have been successfully sold to society whilst the older principles of individual freedom and depth of lived experience are being recontextualized and / or eroded depending on one's perspective. Mixing theory with applied examples, this paper describes how contemporary social technologies have significantly changed our practical reality, a reality where human experience and technical artifacts have become closely intertwined. The paper explores the ontological consequences of this change and the potential in establishing 'Precarious Design' practices and methods as a response to the precarious nature of our existence.

Figure 1. *5th Light,* (2006) from the *7 Light* Series (2005-7) by Paul Chan. Digital video projection 14.00m. Courtesy of Paul Chan and Greene Naftali Gallery, New York. Photograph: Jean Vong. © Paul Chan and Greene Naftali Gallery, 2005-2007.

INTRODUCTION

The physicist David Bohm (1980) posited that the "world is full of movement and becoming, in which any thing, caught at a particular moment, enfolds within its own constitution – the history of relations that brought it here." [1] This is an intriguing position and one that in spirit captures the inherent limitations of a singularly defined experience and gives prominence to the notion of complexity and 'being in flux.' Some years later and based in another field entirely, design thinker and curator Paola Antonelli (2008) postulated that "... core human experience is rendered more urgent by the speed at which technology is moving..."and that a great number of us "...routinely live at different scales, in different contexts, and at different settings – Default, Phone-only, Avatar On, Everything Off on a number of screens, each with its own size, interface, and resolution, and across several time zones." [2] This modern way of existing is often described as appealing, stimulating and empowering. The Microsoft's 2010 campaign "Your potential. Our Passion" [3] is a typical example of the positive infused commercial stance – the proposition being that Microsoft somehow powers our passions – a hard sell for the mega-brand responsible for the likes of the passionless Microsoft Office suite. Microsoft in not alone in such strategies, various social media platforms (Facebook, Skype), digital agencies such as IRISS and technology developers (Nokia, IBM, Symbian) all strive to assist, to connect us through these multiple interfaces and time zones.

The corporate/civic/personal rhetoric of social media is driven by the positive; however, a few somewhat sensationalized counter voices have arisen. The Baroness Greenfield inspired a fierce bout of media anxiety in April 2009 after she published an article in the *Daily Express* titled "How Facebook Addiction Is Damaging Your Child's Brain: A Leading Neuroscientist's Chilling Warning" in which she claimed that there was probable evidence of lasting neurological effects from frequent exposure to social media websites. [4] Since 2007 there has been sustained (but unsuccessful) pressure from the American Medical Association for the American Psychiatric Association (APA) to include internet addiction, video game addiction, e-mail/text messaging within the "behavioral addictions" category in the upcoming 2013 Diagnostic and Statistical Manual of Mental Disorders (DSM – V), the standard diagnostic text used by psychiatrists worldwide. [5] In February 2012, the physiologist Kathy Charles, writing in *The New Statesman*, likened once again the social network to something compulsive and destructive, claiming that: "Facebook keeps users in a neurotic limbo, not knowing whether they should hang on in there just in case they miss out on something good." [6] This paper will attempt to avoid the techno triumphalism of being 'better connected' and similarly the paranoia around digital media's so called deleterious mental effects on users. This paper accepts that we are now in an age where cultural and technological change has created a new reality of sustained rather than temporary movement in which humans can find themselves in a range of expected and unexpected feelings – such as vertigo and liberation or being physically disconnected but emotionally cathected.

IT'S ALL CHANGE

Framed by the premise that knowledge is a new economy, the majority of contemporary users remain uncomfortable around confusion, and if we do encounter it we still expect confusion to be of a fixed and short nature. Human-Computer Interaction (HCI) was a field that historically had not been concerned with representing complexity or mirroring the precariousness nature of our existence. Rather HCI's goal was to gain user satisfaction, to make digital tools more receptive to our needs. There is a danger associated with being in flux as it suggests change, pressure, and movement.

Even Bohm's 'becoming' implies an end rather than an endless becoming. A fundamental of good HCI design was to eliminate or reduce user confusion, to allow us to be stable, to have permanence, to perceive and to be connected to and to transact with the systems and devices that we need. User legibility was preferred over ambiguity. A form of modernist 'heroics' infused design thinking wherein design's agenda was about improving the quality of our lives. Whilst not rejecting the above, recent developments in the field have seen a turn towards experience design, described as a situation where experience and technology are intrinsically enfolded. Lucy Suchman, an anthropologist specializing in the digital, states that the:

> relations of human practice and technical artifact [have] become ever more layered and intertwined. At the same time that the technological project is one of congealing and objectifying human activities, it is increasingly also one of animating and finding subjectivity in technical artifacts. The assimilation of lived experience to technique goes both ways, which only makes the project of re-imagining technological objects the more urgent. [7]

In her use of intertwined layers, Suchman acknowledges the density of the "technological project" which both enables and influences our desires.

An early advocate of this description is Mike Bergman, who is credited with coining the phrase "DarkNet" (2001) Bergman has said that searching on the Internet today "can be compared to dragging a net across the surface of the ocean; a great deal may be caught in the net, but there is a wealth of information that is deep and therefore missed." [8] Intermediate media users can quite effectively create a closed private network of devices used for file and content sharing such as the encrypted messages sent via BlackBerry to various mobs during Britain's August 2011 riots. There is also evidence that users are finding new modes of communication and semantics, [9] such as the increase in personally curating our entertainment and nesting linguistic meaning. For example the practice of posting a YouTube video/song on Facebook which simultaneously is a form of entertainment whilst embedding implied meaning within the lyrics and or video itself, a message or sentiment, which can only be truly understood by select users who are aware of the specific total (online and offline) context of the user.

The deep and cognitive Web is several orders of magnitude larger than the surface or representational Web. This level of subjective and structural complexity means that the Internet still constitutes a free activity where we can move around, sign-in, explore, search, look, understand and comment without a sense of sanction.

Western society has been through an adjustment; we have adjusted to accelerated change, hopefully learned most of the tools required for this new practical reality. Graduating from the novice state towards the intermediate level we psychologically lean on our tools [10] to such an extent that dissociation anxiety has become a popularly understood term – describing our contemporary difficulty when we do not have access to our connective technologies. There have been recent attempts at convergence, by bringing together all our feeds, our emails, texts, tweets into one interface. [11] This attempt to unify the users' experience is a logical but perhaps anachronistic goal when each media instance fosters a different cognitive connection. Blending/unifying these mental conditions into one screen space is not a solution. We 'need' these tools to provide different things for us: acts of sharing (Blog, Twitter, Podcast, MySpace, YouTube, Flicker, Vimeo, Pinterest), discussion (Twitter, Newsvine, StumbleUpon, Youtube) and connecting, re – connecting (Facebook, MySpace, LinkedIN, Friendster) are all

distinct practices. Each of these different functions requires significant effort to immerse and different commitments in terms of assessing, changing and publishing content; each interface (after all conceived as a discrete experiences) cues the user into different mindsets. Bringing them all together may result in a useful Meta view of activity but perhaps not in itself a unifying experience that can solve the more fundamental mental and emotional conditions of confusion, noise and anxiety.

It would seem that the pace of technological change, and holding an ambition to describe and/or respond these new human experiences requires first recognition of these conditions. Today's torrent of societal change and unrelenting uncertainty has left many industries sluggish and has negatively affected many corporate identities (consider the state of journalism, publishing, music distribution, retail). The speed of change has become recognized (no longer new) but many are now feeling the impact of this sustained change. Richard Watson advocates planning time for "slow flow" thinking to allow our conscious/ subconscious minds to complete their vital processing key to our creative problem solving abilities [12] – whereas the author Will Self ponders the need for "slow news" [13] in opposition to ubiquitous rolling twenty four hour news feeds.

Cultural theorist Johannes Huizinga (1938) conceptualizing play stated "that within a game you are spatially and temporally segregated from the requirements of practical life." [14] Whereas to be spatially and temporally segregated (from workmates, lovers, family and friends) are now common requirements of practical life. Perhaps there are merits to re-exploring the ludic discourse and revisit the psychology of role-playing. Role testing or playing is expected to be transitional or done in our youth, but within the social network and digital gaming contexts we can extend this pro-

cess. The digital archive can enable us to relive the past in unhealthy ways; nostalgia is no longer what it once was. Henry Jenkins et al. in *Confronting The Challenges Of Participatory Culture: Media Education for the 21st Century* (2006), describes the activity of "prosuming" (producing and consuming) as an act of explicit participation [15] and Mirko Schäfer (2011) highlights the importance of implicit participation in the success of the Web 2.0, a situation where user activities are implemental unknowingly in interfaces and back-end design. [16] Both Jenkins and Schäfer remind us how tenuous the notion of freedom within social media is. Eric Schmidt, Google's Executive Chairman, talking to *The Wall street Journal* in 2010, reminds us of another shift – the move from mass media to the broadcasted digitations of the great mass of individuals: "I don't believe society understands what happens when everything is available, knowable and recorded by everyone all the time" [17] and predicts that future teenagers will legally be allowed to change their name to disassociate themselves from their previous digitally evidenced actions/identity. In this scenario what does suspension of belief and or self now mean?

Huizinga in his description of games acknowledges that we are also "bound by a self-contained system of rules that holds absolutely." [18] As stated acceleration of the Internet and its online culture left the corporate world far behind, conventional advertising strategies were ineffective, the environment was to a large extent unstructured. New rules were slow in coming; what remained meanwhile was self-governance. We explored our user-role and sense of self in a freer system of ethics and behavior – many used alter egos, role-playing and exploration of promiscuity and the taboo. [19] What constitutive and regulative rules now control our behavior? If we remain in a gaming mindset, then the conventional wisdom is that life shall intrude, that there is a porous magic circle. In offline, online and everything in-between people are crossing

this reality / non-reality threshold all the time in both directions, "carrying their behavioral assumptions and attitudes with them." [20] Practically testing or breaking through the offline and online bubble has resulted in some contentious legal interpretations such as the recent conviction that Paul Chambers received for his "tongue-in-cheek" tweet about blowing up Robin Hood airport in Britain in January 2010. A vigorous debate has ensued around appropriate contextualization of Chambers actions. The presiding judge interpreted that "any ordinary person" would interpret the tweet as alarming. [21] The notion of ordinary is now in itself a fraught concept. What is ordinary social insight when at different scales, in different contexts, and at different settings? There are still no clear regulative rules that prescribe acceptable social conduct or communication within social media (the UK Digital Economy Act 2009 is mainly interpreted as copyright protection). The Chambers case shows how problematic actions without appropriate context are.

RESPONDENTS

With HCI's turn to experience brings a need for engagement with multidisciplinary methodologies as dense as the reach of the problem. For designers questions now arise about their role in solving societal problems in a multidisciplinary terrain. Anatonelli (2008) addressed the role of design in a world which humans have surpassed their Enlightenment roles as neutral observers and have become "actors on the very forces of nature." [22] Implying that to be effective one must be active within the complexity. She also saw a need for users to develop personal elasticity, that being: "the by-product of adaptability and acceleration, elasticity means being able to negotiate change and innovation without letting them interfere excessively with one's own rhythms and goals." [23]

In traditional dialectical tension to Design, Art has traditionally functioned as a deliberate and complex means of self-expression and as such is historically comfortable with subjectivity. The ensuing paradigm of uncertainty, ambiguity and ambivalence in early twentieth century Art post Dada, Fluxus et al. preceded Zygmunt Bauman's turn of the century notion of "liquid modernity"; [24] a new modernity in which fractured timelines were normal, where social structures were no longer stable, and a state of being where fixed concepts like 'career' and 'progress' could no longer be meaningfully applied. The oppositional stance between Art and Design may now be redundant in a multidisciplinary terrain, where skills and strengths of many are needed.

Digital Media, whilst regarded as distinct from Art [25] has arguably never contained any stable goals or ideologies and is populated by a mix of pioneering creative technologists (Golan Levin, [26] Robert Hodgin, [27] Jer Thorp [28]), obsessives (Joshua Davis [29]) and niche collectives (Antirom [30], c5corp [31]) most of whom were practicing by their own free will removed from both the monetized Art world or the need to articulate any socio-political conceptual intentions. Golan Levin in an interview for *Dazed and Confused* (2009) states: "I don't really give much consideration to categories like 'art,' 'design,' 'performance,' 'science.' These boxes may be helpful for making sense of the past, but not necessarily for anticipating the future." [32]

Media theorist Lev Manovich in his early essay 'Generation Flash' (2002) also describes this foundational post-conceptualism:

This generation does not care if their work is called art or design. This generation is no longer is interested in 'media critique' which preoccupied media artists of the last two decades; instead it is engaged in software critique. This generation

writes its own software code to create their own cultural systems, instead of using samples of commercial media. 33

Digital Media's attitudes of anti-categorization made and continue to make the community particularly agile and able to move between the traditional fields of Art, Design and Computing – a potential model for coping with current challenges.

Naming the Precarious Designer

When asked to reflect on the Art of the first ten years of the millennium, Art critic Hal Foster 34 focused on the "Precarious Art" which functions as a social-political critique, work which foregrounds its own schismatic condition, its own lack of shared meanings, methods, or motivations, Art if you will, that captured a sense of cultural vertigo and liquidity. Foster cites Paul Chan's *The 7 Lights* series (2005-7) and Mark Wallinger's *State Britain* (2007) as examples. Chan's *The 7 lights* (see figure 1) are a series of six projected digital animations in which silhouetted images of the life's detritus slowly move, the projects builds towards scenes of rising and falling of human forms which aim to trigger the collective memory of the falling victims in the 9/11 attacks. More overtly questioning the current natural order, Wallinger's *State Britain,* staged in the Tate's Durveen halls, was a precise 600-piece reconstruction of the shut down Brian Haw anti Iraq war protest. Wallinger gives us Haw's collection of slogans and raw and violent images an act, which both asserts their value and makes the viewer consider that which had previously been censored by official media streams. Applying Foster's description, a Precarious Design paradigm could be a community of Precarious Designers and technologists who create experiences and artifacts from the flâneur's position of fascination with all aspects of lived experience, through active participation, whose practices are naturally occurring acts of self-expression (unlikely to be commissioned), critical and or provocative often involving multiple disciplines.

However, even this may not be enough. David Peat in *Infinite Potential: The Life and Times of David Bohm* (1997) writes that Bohm's roommate "believed that Caltech students learned physics through the act of problem-solving itself. But for Bohm, understand-

ing always involved probing deeper and deeper into underlying assumptions." 35 It's a tricky balance for any Precarious Designer who needs to participate in these new structures and technological changes, both the anticipated and the unexpected whilst finding the rigor to 'think slow' when the changes are fast. Fundamental understanding is also potentially challenged by a move into multidisciplinary or as the designer/artist/writer Alexandra Daisy Ginsberg questions "...An increasingly complex scientific world obscures the macroscopic. Can design claim it, bringing the skills of synthesis, collaboration and tangibility to allow us to address the future?" 36 Precarious designers accept acceleration; recognize the fluxing user position by being one, whilst parsing the commercial positivism and the deleterious sensationalism that circles the technological project. As with Foster's Precarious Art, Precarious Designers can function within a post-conceptual space where there is no distinction between works of self-expression and works of social critique (i.e. they are part and parcel of the same activity). A Precarious Design community by collectivizing or simply collating works 37 could also give life and voice to the broader fluxing context, objectifying places within the complex digital–physical continuum of our current reality, after all they have easy access to new forms of computational curation aids, such as Tumblr and Pinterest.

Suggested Examples

Service design and co–design go some way to addressing the HCI context of complexity but from a procedural and often corporate view. When attempting to congeal and objectify contemporary human activities it is not surprising that broadly speaking Design has moved away from an industrial to emotive approach. 38 An excellent example of this is the *We Feel Fine* project, 39 an emotional search engine started in 2005 whose goal is to collect the world's emotions to help people better understand themselves and others (see figure 2). The work continually


Figure 2. *The We Feel Fine Project,* 2005-present, by Jonathan Harris and Sep Kamvar. Java applet and web browser. © Jonathan Harris and Sep Kamvar, 2005. Used with permission.

harvests sentences containing the phrase 'I feel' or 'I am feeling' from newly posted blog entries, stores them in a database, and displays them in an interactive Java applet. *We Feel Fine* collects around 15,000 new feelings per day, and has saved over 13 million feelings since 2005, forming a constantly evolving portrait of human emotion.

Another project addressing emotion is James Auger and Jimmy Loizeau's *Happylife* (2010) based on new profiling technology created by Aberystwyth University's Reyer Zwiggelaar and Bashar Rajoub. *Happylife* (see figure 3) detects changes in a person's mood and emotion by taking thermal images of his or her face and deploying facial-recognition software to detect emotions. The imagined context for *Happylife* is within the family home (rather than the original task of looking at criminals); the interface has specific dials for each family member that registers current and predicted emotional states (theoretically based on data accumulated over years by the machine). 40

Figure 3. *Happylife,* 2010, by Auger and Loizeau. High-resolution thermal-image camera, Corian, stainless steel, electronics, and mechanical and computer components (40 × 100 × 9 cm). © Auger and Loizeau, 2010. Used with permission.
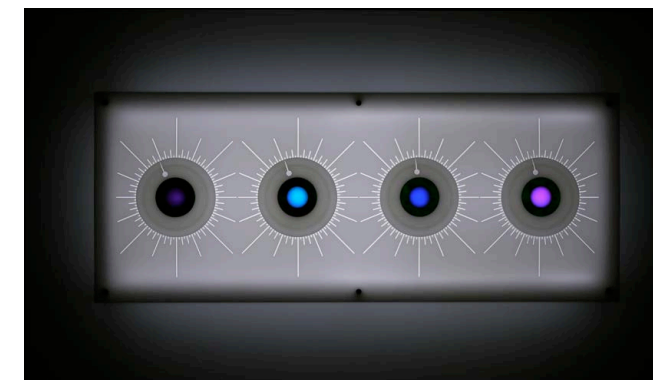
Having come through the other side of demateri-alization, re-materialization is also becoming more prominent within Design. Royal College of Art Design Interaction graduate Noam Toran pushed the remit of product design with his *Accessories for Lonely Men (2001)*. A series of "eight electronic devices designed to alleviate loneliness by simulating the sometimes annoying traces that one's companion would normally leave behind." [41] *Accessories for Lonely Men* (see figure 4) is a bittersweet critique on how post Mil-lennium intimacy functioned and perhaps is as if not more pertinent today.
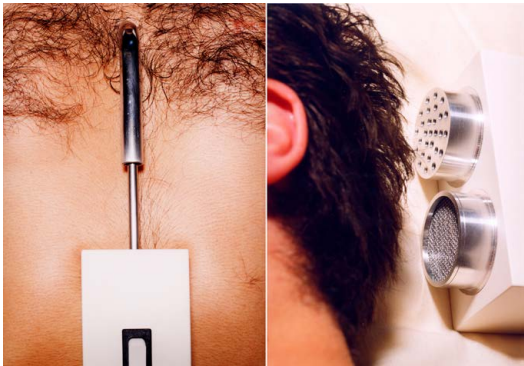

Figure 4. *Detail of Chest Curler and Heavy Breather from Accessories for Lonely Men,* 2008, by Noam Toran. Product Design. © Noam Toran, 2008. Used with permission.

Another example of materialization is Tim Kring's Lon-don based augmented reality game *Conspiracy For Good* which confidently attempts to make a virtue out of the game fiction / social reality divide [42] by gener-ating tangible benefits such as new Zambian libraries from participants' gameplay.

The uptake in programming projects such as Pro-cessing (Java) and openFrameworks (C++) by non-computer scientists is making engineering physical and digital interaction more accessible. [43] The artistic fusion with science has also reached into Natural Sci-ence collaborations, such as Cohen Van Balen's *Pigeon d'Or* (2011). *Pigeon d'Or* is a bacterial project that sees Balen use feral pigeons as a platform and interface for synthetic biology. [44] The aim of the project is to give the pigeon a new societal function of defecating soap. *Pigeon d'Or* also contains series of objects such as a house that attaches to your windowsill and allows you to feed, select and separate the pigeons (see Figure 5).

Other recent examples of science-art fusion is C-LAB's *Stress-O-Stat* (2012) a living artwork that "visu-ally captures stress in bacteria as light... The work ex-plores convergence between life and machine, where the machine controlling the bacteria becomes life-like and the bacteria, engineered through synthetic biol-ogy, machine-like" [45] or Alexandra Daisy Ginsberg's *Seasons of the Void* (2013), a project which imagines fruits grown from redesigned yeast, fueled by electric-ity instead of sunlight for astronauts as their ship flies away from the sun. [46]

Interestingly, many of these projects share a specu-lative or provocative function, asking us to 'feel' something in response (and not necessarily a posi-tive response). *Pigeon d'Or* in its orchestration and application offers/requires a new form of participation are we prepared to overcome our squeamishness to physically handle (or even care for) feral pigeons in a bid to clean up our urban spaces? *Seasons of the Void*, whilst deploying a fictive context infused by Kubrick's *A Space Odyssey* still makes us consider the here and now of our relationship with artificially modified foods. There is something bleak in *Happylife's* future nostal-gia of lost affinities within the family home, or at least something uncomfortable in that we may come to need the assistance from machines to observe and log our emotional states. Similarly *WeFeelFine's* reminder that human experience can be universally recognized across the world is a comforting one, but the scale of that activity, the 13 million rising individual acts of putting ones feelings 'out there' is both momentous and worrying. After all, the 'there' is a global system of interconnected computer networks, and not a verified set of responsive persons.

CONCLUSION

With the debate still ongoing amongst psychiatrists and medics regarding technology addiction and the biochemistry of their impact, what is clear is the challenges in defining 'self' in dynamically changing contexts and interactions when everything is avail-able, knowable and recorded by everyone all the time is pertinent. Given the cognitive freedom existence feels quite different. With new rules our identities and ontologies need support. Both applied and artistic

Figure 5. *Pigeon d'Or,* 2010. Hybrid Art. Photographs by Tuur Van Balen and Pieter Baert. © Tuur Van Balen and Pieter Baert, 2010. Used with permission.

practices are striving to synthesize and express what constitutes a core human experience and develop methods to survive and succeed within our fluctuating context of extraordinary change. Traditional opposi-tional stances such as Art and Design may now be re-dundant in a multidisciplinary terrain, where skills and strengths of many are needed.

What becomes increasingly significant is establishing what people are actually doing and what people need to do to remain healthy. Problematically this practical reality is both without perceived sanction and seems to offer limitless individual agency; however, we are not free of corporate or political and legal influence and ramifications. Users need help in delineating new cognitively useful, safe and or dangerous personal and legal boundaries. In a sustained world of acceleration problem solving becomes interesting. If we fully em-brace Bohm's implicate possibilities then, as Suchman writes:

Integration, local configuration, customization, maintenance and redesign on this view represent not discrete phases in some 'system life cycle' but complex, densely structured courses of articulation that work without clearly distinguishable boundar-ies between. [47]

User experience can no longer be explored in terms of a singular moment or locale but rather over longer pe-riods and multiple interfaces. The Precarious Designer, who by way of a personal insight may not necessarily be born digital but observes and lives digitally. By ex-pressing current and near future scenarios this nascent grouping is well positioned to problem-solve, probe deeper and tease out underlying assumptions. Many of the aforementioned projects give form – by their provocations or innovation – to practical questions and help reveal our feelings towards new realities and possibilities, thus helping to ground our here and now if only momentarily. ∎

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35. David Peat, *Infinite Potential: The Life and Times of David Bohm* (Reading, MA: Addison-Wesley, 1997), 34.

36. Alexandra Daisy Ginsberg, "Design Evolution," Unpublished Masters Dissertation, Royal College of Art, 2008.

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40. James Auger and Jimmy Loizeau run London-based design partnership Auger-Loizeau combining a range of disciplines that include product design, engineering, and fine art. James Auger and Jimmy Loizeau's website, http://www.auger-loizeau.com/index.php?id=23 (accessed April 30, 2013).

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